DEPLETED URANIUM

Depleted Uranium

	Natural Uranium	Depleted Uranium
^{234}U	00.0057 %	00.0005 %
^{235}U	00.7204 %	00.2500 %
^{238}U	99.2739 %	99.7495 %
Total	100.0000 %	100.0000 %

- By-product of uranium enrichment process
- 1.6 times denser than lead
- Slightly softer than steel
- Pyrophoricity (WITH HARD TARGET IMPACT)
- Relatively low fabrication costs
- Readily available

Uranium Decay Chain

Nuclide	Half Life	Emissions
Uranium-238	4.5 billion yrs	alpha
Thorium-234	24.1 days	beta / gamma
Proactinium-234	6.7 hours	beta / gamma
Uranium-234	247,000 yrs	alpha / gamma
Thorium-230	80,000 yrs	alpha / gamma
Radium-226	1,600 yrs	alpha / gamma
Radon-222	91.752 hours	alpha / gamma
Polonium-218	3.05 min	alpha / beta
Lead-214	26.8 min	beta / gamma
Astatine-218	2 seconds	alpha
Bismuth-214	19.7 min	beta / gamma
Polonium-214	164 μsec	alpha / gamma
Thallium-210	1.3 min	beta / gamma
Lead-210	21 yrs	beta / gamma
Bismuth-210	5.0 days	beta
Polonium-210	138.4 days	alpha
Thallium-206	4.19 min	beta
Lead-206	STABLE	

Uranium Decay Chain

High Probability

Low Probability

Nuclide	Half Life	Emissions
Uranium-238	4.5 billion yrs	alpha
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Polonium-214	164 μsec	alpha / gamma
Thallium-210	1.3 min	beta / gamma
Lead-210	21 yrs	beta / gamma
Bismuth-210	5.0 days	beta
Polonium-210	138.4 days	alpha
Thallium-206	4.19 min	beta
Lead-206	STABLE	

Depleted Uranium

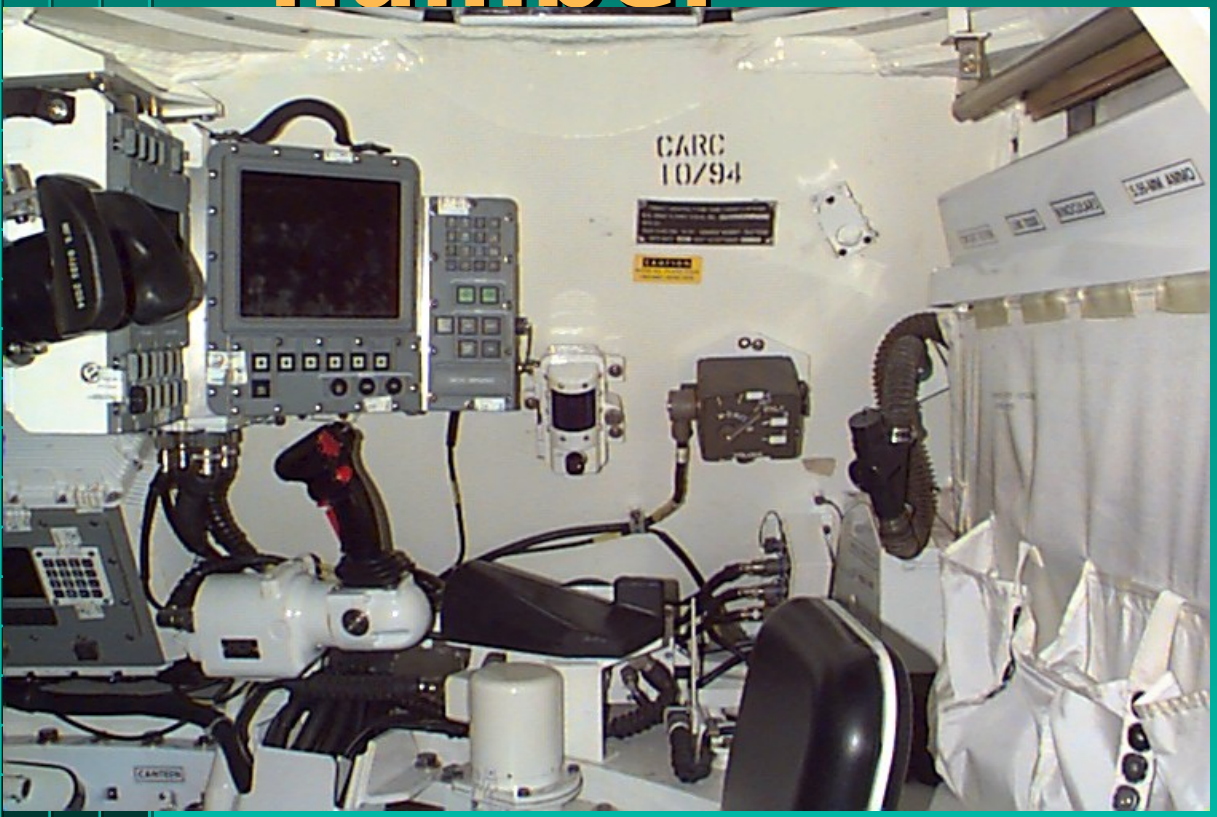
- Alpha, Beta, and Gamma Emission
- 4.5 Billion Year Half Life
- Specific Activity is Low
  - A 1 Ci source would weigh 6,615 lbs

DU ARMOR

- All M1A2 Tanks
- Some M1A1 Tanks
  - Commonly called “Heavy”
- Located only in the forward slope of the turret
- Detectable radiation on the outside of the turret less than 0.5 mrem

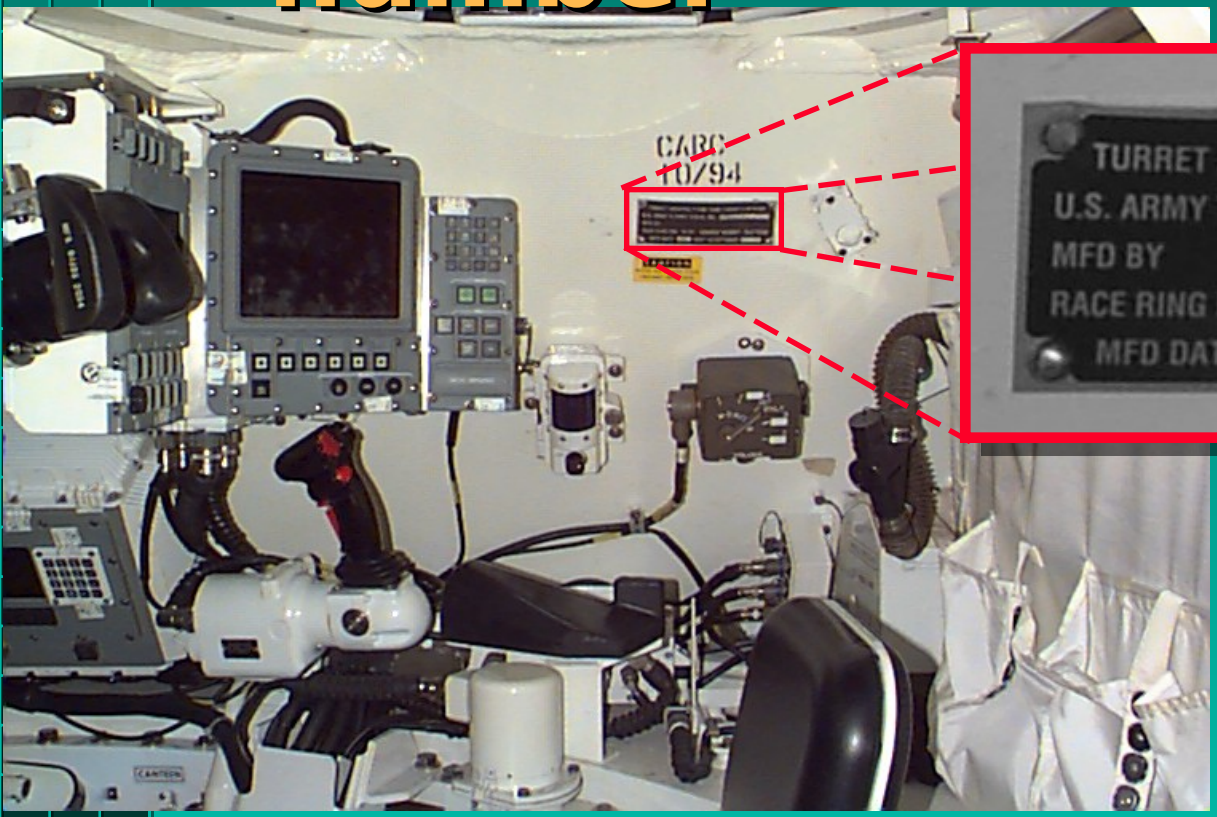
DU ARMOR

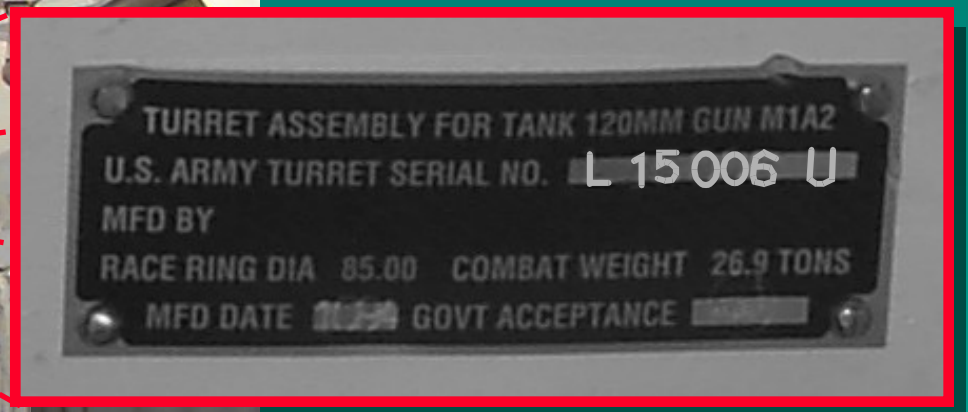
- Identified by the letter “U” in the turret serial number



DU ARMOR

- Identified by the letter "U" in the turret serial number




TURRET ASSEMBLY FOR TANK 120MM GUN M1A2
U.S. ARMY TURRET SERIAL NO. L 15 006 U
MFD BY
RACE RING DIA 85.00 COMBAT WEIGHT 26.9 TONS
MFD DATE GOVT ACCEPTANCE

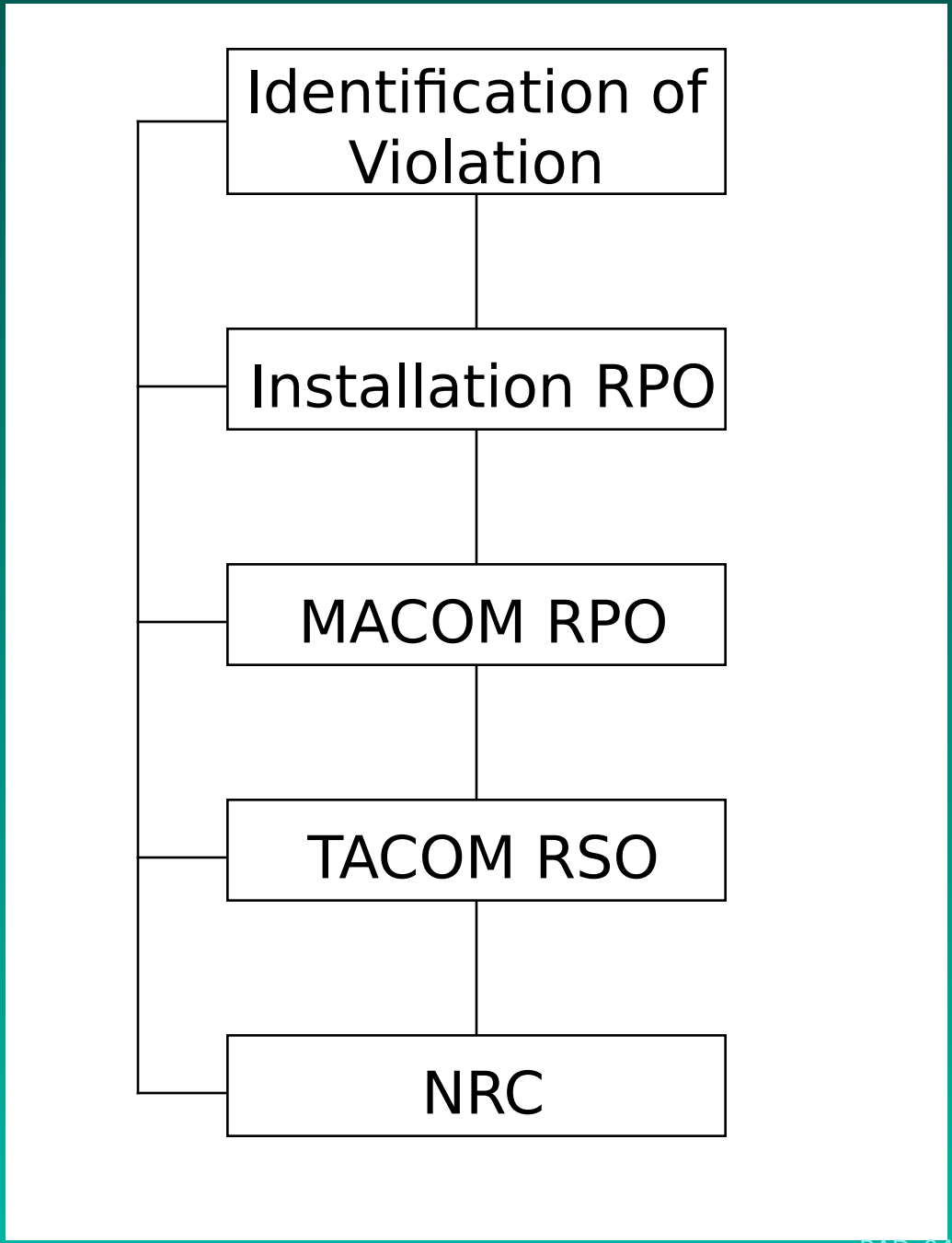
Required Notification

Commander, TACOM
ATTN: AMSTA-CS-CZ
Warren, MI 48397-5000

DSN: 786-7635/6121
Commercial: (810) 574-7635/6121

After duty hours:
DSN: 786-5935/5511
Commercial: (810) 574-

Reporting Chain



DU Munitions

105mm	120mm	25mm	30mm	155mm	Mine
M774	M827	M919	PGU-14/B	M692	M86
M833	M829		PGU-14A/B	M731	
M900	M829A1		PGU-14B/B		
	M829A2		PGU-14A/A		

Super Box

DU Munitions Test Range

RAD_04_09

Loss or Unauthorized Firing

COMMANDER; HQ IOC
ATTN: AMSIO-DMW
ROCK ISLAND, IL 61299-6000

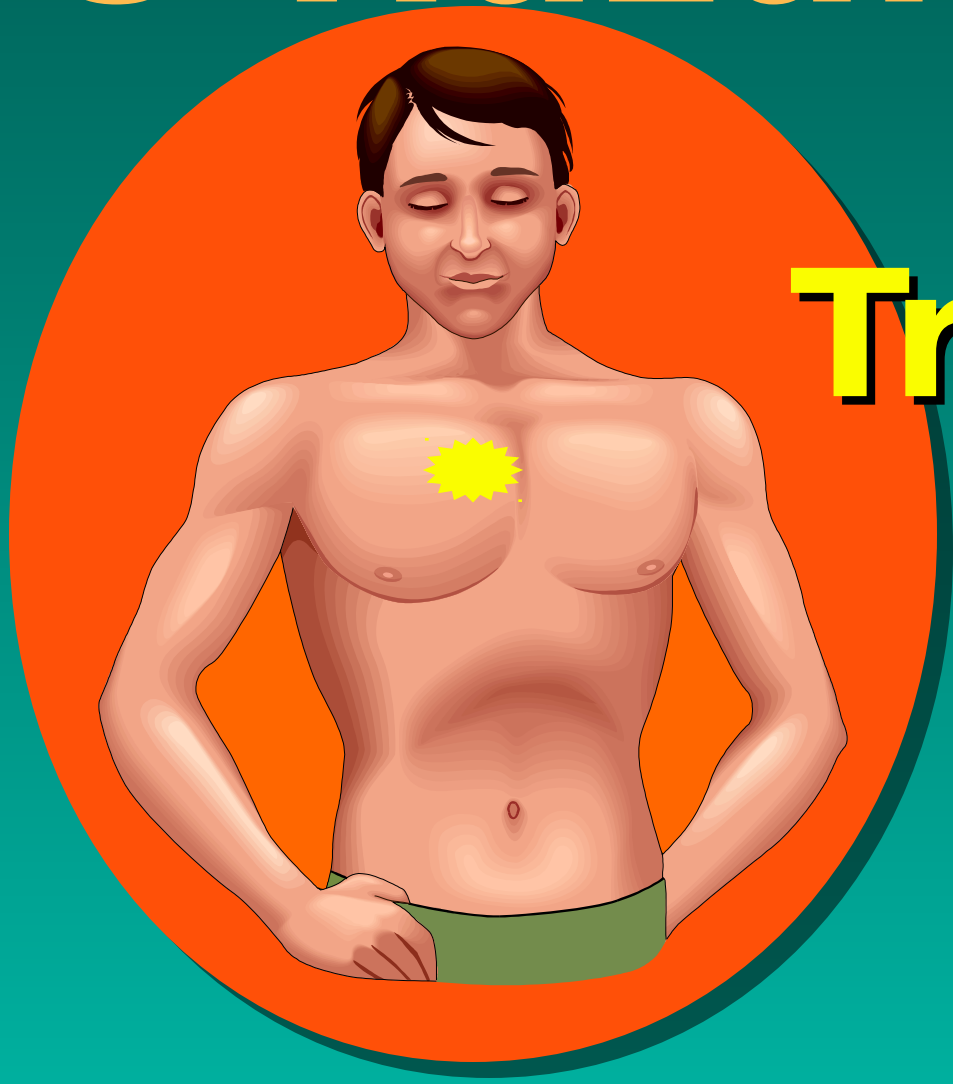
DSN 793-0338/2969/1766
AC (309) 782- 0338/2969/1766

Non duty hour, call staff duty office

DSN 793-1110
AC (309) 782-1110

DU Hazards

DU Hazards



Tritium

DU Hazards

Tritium

DU Hazards

DU Hazards

DU Hazards

DU Hazards

DU Hazards

DU Hazards *Inhalation*

- **Hard Target Impact**
  - 60% Respirable Particles
  - Mostly Soluble
  - High Probability of Uptake if Inhaled
- **Fire (DU Ammunition on Board)**
  - Less than 0.5% Respirable Particles
  - Mostly Insoluble
  - Low Probability of Uptake if Inhaled